

945-2010 ADDENDUM #5

WINNIPEG FIRE PARAMEDIC ALTERNATIVE EMERGENCY CENTRE – INTERIOR RENOVATION AT 185 KING STREET – MAIN FLOOR

URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID OPPORTUNITY

ISSUED: January 19, 2010 BY: Kathy Roberts TELEPHONE NO. (204) 470-7380

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 8 of Form A: Bid may render your Bid non-responsive.

PART B – BIDDING PROCEDURES

Revise: B7.7.1 to read: Bids submitted by internet electronic mail (e-mail) will not be accepted.

PART D - SUPPLEMENTAL CONDITIONS

Revise: D16. LIQUIDATED DAMAGES to read:

D16.1 If the Contractor fails to achieve Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Calendar Day for each and every Calendar Day following the days fixed herein for same during which such failure continues:

- (a) Substantial Performance Five Hundred dollars (\$500.00)
- (b) Total Performance Two Hundred dollars (\$200.00)
- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance or Total Performance by the days fixed herein for same.

D16.3 is unchanged

Revise: D14.1 to read: The Contractor shall achieve Substantial Performance by May 13, 2011.

Add: D14.4 Requirements for Substantial Performance:

- (a) All equipment must be installed and operating correctly, including full commissioning.
- (b) The Work area must be clean and free from tools, materials, equipment, waste products and debris.
- (c) The Work area and all systems must be ready to be turned over to the City.

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Revise: D15.1 to read: The Contractor shall achieve Total Performance by May 27, 2011.

Add: D15.4 Requirements for Total Performance:

- (a) Contractor must complete and/or correct deficiencies with zero or minimal disruption to staff and systems. Contractor shall complete work after hours if necessary.
- (b) Contractor has delivered the completed and approved Operating and Maintenance Manuals to the Contract Administrator.
- (c) Contractor has provided training on the new equipment and systems.
- (d) Contractor has delivered the completed and approved As-Builts drawings to the Contract Administrator.

Page numbering on some forms may be changed as a result.

PART E - SPECIFICATIONS

Revise: E1.1 to read: The following are applicable to the Work:

<u>Drawing</u>	Revision	Drawing Name/Title
<u>No.</u>	<u>No.</u>	
A1	R1	PARTIAL MAIN FLOOR PLAN – DEMOLITION & RENOVATION PLANS, ROOM FINISH SCHEDULE
A2	R0	PARTIAL MAIN FLOOR PLAN - REFLECTED CEILING, DEMOLITION &
		RENOVATION
A3	R0	PARTIAL MAIN FLOOR PLAN – FLOOR FINISH & FURNITURE PLAN
E1	R1	EXISTING LIGHTING PLAN – DEMOLITION
E2	R0	NEW LIGHTING PLAN
E3	R0	MAIN FLOOR PLAN – EXISTING POWER AND SYSTEM PLAN
E4	R1	MAIN FLOOR PLAN – NEW POWER AND SYSTEMS PLAN
E5	R2	ELECTRICAL SINGLE LINE DIAGRAM
E6	R2	ELECTRICAL SPECIFICATION
E7	R2	ELECTRICAL SPECIFICATION
M1	R2	PARTIAL MAIN FLOOR PLAN – MECHANICAL DEMOLITION
M2	R4	PARTIAL MAIN FLOOR PLAN – MECHANICAL RENOVATION
M3	R3	MECHANICAL SEPCIFICATION

Add: in section E15. VOICE AND DATA CABLING

Contractor Qualifications

The Contractor performing the data cabling installation shall have a structured cabling industry affiliation membership such as BICSI (Building Industry Consultants International), RCDD (Registered Communications Distribution Designer), and/or a structured cabling vendor certification. All data cabling installers shall be licensed. Upon request, the data cabling contractor shall provide references of similar projects.

Horizontal Cabling

- E15.6 Category 6 cabling shall be certified and tested to a minimum of 250 MHz, and shall meet minimum technical specifications in TIA 568A (Telecommunications Industry Association). Colour to be blue.
- E15.7 All data telecommunication jacks shall be suitable of Category 6 connectors and shall be TIA certified Category 6. Colour to be blue.
- E15.8 No installed cabling may be exposed to view outside of the LAN room. It shall be within a raceway conduit, cable tray, power pole, or cable trough.

- E15.9 All horizontal cabling runs shall run from each work area in a star topology to LAN room as shown. There shall be no connector in the cable run between the outlet in the work area and the LAN room, except for the data zone boxes. All cables shall be supported by cable tray, or in very short distances by J-hooks. All exposed Category 6 wiring shall be plenum-rated.
- E15.10 No cabling run may exceed a length of 90 meters except to the Radio Rack.
- E15.11 Three of the existing racks in the LAN room are being replaced (supplied by City). Layout will be approximately as shown on drawings. New wiring is to terminate at these racks. Contractor is responsible to re-locate and re-install any existing wiring that is to remain.
- All Category 6 cabling shall be terminated in the LAN room on rack mounted Category 6 patch panels (maximum of 48 jacks per panel). City shall supply wiring racks for LAN room, patch panels, Leviton RJ45 cable connectors, and patch cables. Contractor to supply and install complete data cabling from patch panel to original source in building. Contact City of Winnipeg BTS through Contract Administrator.
- E15.13 The Category 6 cabling in the racks shall be installed with sufficient and appropriate mounting clips, brackets and cable management to provide a secure and maintainable system. Care shall be taken to not cause the cables to be overly crimped.
- E15.14 The UTP Category 6 cable tail shall be terminated with a minimum of 14" slack, but not to exceed 18".
- E15.15 After dressing cable to the final location, the sheath shall be removed to a point that allows the conductors to be splayed and terminated in a neat and uniform fashion. Every effort must be made to maintain sheath integrity by removing only as much as is practical to accomplish termination. Cable pair twist shall be maintained up to the point of termination. As stated in TIA 568A, the pairs in a cable should never be untwisted more than 0.5 inch from the point of termination. Under no circumstances shall cable pairs be untwisted or otherwise altered prior to termination.
- E15.16 Any unused cabling shall be labelled and loosely coiled.
- E15.17 Contractor shall specify cables proposed for use and submit documentation proving the proposed cables meet the specification.

Labelling

- E15.17 All cables (new and relocated) shall be labelled with tag wraps or some other permanent marker capable of withstanding multiple pulling of cable through raceways. Labels shall be located 0.5 meter from the work area end.
- E15.18 All terminations must be clearly identified on patch panels in LAN room. All jacks in the patch panel must be in sequential order.
- E15.19 At each work area, faceplate outlet shall be professionally printed with jack numbers clearly visible without removing outlet faceplate. The labelling shall be metal or vinyl adhesive tape with embossed or indelible printing for each outlet. Contract Administrator shall advise on the alphanumeric numbering scheme.

Field Test Quality

- E15.20 The Contractor shall visually inspect all cables, cable reels and shipping cartons to detect cable damage incurred during shipping and transport. Visibly damaged items shall not be installed.
- E15.21 Conduct cable testing only upon completion of installation.
- E15.22 Minimum of a level II-E field tester shall be used to verify cabling performance.
- E15.23 In addition to hard copy test results, acceptable electronic format for test results are Microsoft Excel for each link.

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E15.24 The Contractor shall describe in detail its proposed test plan to detect any defective components and to demonstrate that the installation complies with the specification.

Add:

E16. MISC ELECTRICAL

- E16.1 AC90 cable may be used for drops from conduit system to recessed lighting fixtures in accessible ceilings or outlet boxes in steel stud walls. Maximum run of AC90 in accessible ceiling space shall be 5'-0".
- E16.2 Each circuit for computer equipment, copiers and printers shall have a separate neutral conductor.
- E16.3 Dimmable switch shall be Lutron Maestro.
- E16.4 Further to Drawing E-5, Contractor to supply and install 200A heavy duty manual disconnect and camlock panel, both to be provided with locking covers and mechanisms, and type 3R NEMA enclosures.

E17. CUTTING AND PATCHING

- E17.1 Locate holes and provide sleeves, cutting and fittings required for the Work. Relocate improperly located holes.
- E17.2 Drill for expansion bolts, hanger rods, brackets and supports.
- E17.3 Provide openings and holes required in precast members for the Work.
- E17.4 Provide scanning of walls and floors prior to any coring. Ensure no cutting of structural members occurs without written permission from the Contract Administrator.
- E17.5 Patching of finished construction of building shall be performed by qualified tradesperson.

E18. OPENINGS IN FIRE SPEARATIONS

E18.1 Trades having openings in fire separations for passage of pipes, duct, etc., are responsible for firestopping around such holes in order to maintain integrity of fire separations. Work shall be performed by a licensed qualified tradesperson. Submit all fire stopping material application numbers for approval to the Contract Administrator.

E18.2 Fire-Stopping:

- (a) Fire-stopping to be fire-barrier non-combustible, semi rigid, mineral fibre felts supplied by one supplier for the entire project.
- (b) Material shall be of density, width and depth to maintain assembly fire resistive rating.
- (c) Fire-stopping used shall be listed, and a bear label of Underwriters' Laboratories of Canada guide number.
- E18.3 Impaling Clips shall be 50 mm (2") wide x 0.6 mm (24 ga.) steel, z-formed, configuration with bottom dimension conforming to opening size listed in manufacturer's sizing chart. Install as required.

E18.4 Installation:

- (a) Install fire-stopping with minimum 25% compression in accordance with manufacturer's recommendations and ULC test requirements. (CAN4-S115M latest edition)
- (b) Butt succeeding sections of fire-stopping tightly up against the preceding. Leave no voids.
- (c) Use two impaling clips per 1.2 m (48") length of fire-stopping material, to support and secure fire-stopping.

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E19. LAMACOID LABELS

- E19.1 Further to Drawing E6, section 1.19 LABELS, the following items will require labels:
 - (a) Lamacoid Labels: Panelboards, large disconnect switches, transfer switches, UPS, bypass switches, transformers, distribution breakers where applicable, and any other large equipment.
 - (b) Lamacoid or Electronic Self-Adhesive Labels: All devices, switches, receptacles, voice data components, small disconnects, etc.
- E19.2 Emergency power to be white lettering on red. Normal power to be white lettering on black. Sizing and layout to suit the item to be labelled, and must be approved by the Contract Administrator.

E20. SPRINKLERS

E20.1 Further to General Notes on Drawing M-1, where existing sprinkler heads are to remain, the Contractor shall include the cost to remove the heads to facilitate tile removal, and replace the sprinkler heads after the new tiles are installed. Include all costs related to draining, refilling, and testing the system.

DRAWINGS

Replace: 945-2010_Drawing_E6-R1 with 945-2010_Addendum_5_Drawing_E6-R2

Replace: 945-2010_Drawing_E7-R1 with 945-2010_Addendum_5_Drawing_E7-R2